



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Sean A. McCarthy

Serial No.: 09/263,022

Filed: March 5, 1999

For: *NOVEL HUMAN DICKKOPF-RELATED  
PROTEIN AND NUCLEIC ACID MOLECULES AND  
USES THEREFOR*

Attorney Docket No.: MNI-108CP2

Group Art Unit: Not yet assigned

Examiner: Not yet assigned

#11  
D.G.J  
5/9/01

Commissioner for Patents  
Washington, D.C. 20231

**Certificate of First Class Mailing (37 CFR §1.8(a))**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on the date set forth below.

April 6, 2001  
Date of Signature and of Mail Deposit

By:

DeAnn F. Smith  
DeAnn F. Smith, Esq.  
Registration No. 36,683  
Attorney for Applicant

**INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

Applicant and his attorney are aware of the following publications and information, listed on the attached PTO Form 1449, and in accordance with 37 C.F.R. §1.97 hereby submit these publications for the Examiner's consideration. A full copy of each cited publication is enclosed.

With respect to at least some of the publications which Applicant has made of record, in particular the GenBank and GenSeq records and BLAST search results listed on the enclosed PTO Form 1449, in order to assist the Examiner in understanding the

relevance of the above-enumerated references in order that he may consider them, the enclosed PTO Form 1449 lists a "publication date" for at least the GenBank records included among references A18-M6. Applicant invites the Examiner's attention to the fact that the "publication date" listed for each of references A18-M6, which are printouts of electronic GenBank and GenSeq database records, corresponds to a date appearing on a printout of the record indicating either the date the record was first made publicly available or the date the record was subsequently revised. In the case of revised records, Applicant further invites the Examiner's attention to the fact that earlier versions of such electronic records may have been available prior to the "publication date" appearing on the printed record and listed on the enclosed PTO-1449 Form submitted herewith. However, Applicant is unaware of the content of such earlier versions, and/or of the nature of any data added or revised with each revision of such electronic records.


"Authors" have not been provided for the GenBank and GenSeq records cited in the PTO-1449 Forms submitted herewith, as Applicant is unaware of the identity of any particular *person* who may have authored the GenBank and GenSeq records cited. The Examiner is invited to look at the printed copies of the enclosed GenBank and GenSeq records, in particular, to the REFERENCE field of the database record (for GenBank records) or the PN field (for GenSeq records), for the source of the information (*e.g.*, printed publications, direct submissions, or a combination thereof) used to create a particular record. Moreover, neither publication dates nor authors have been listed for the three BLAST reports cited as references M19-N10 in the PTO-1449 Form as these are not "printed publications" having an "author" or "publication date". Rather, these BLAST reports were generated by the Assignee and have been provided to assist the Examiner in understanding the relevance of the GenBank records cited on the enclosed PTO-1449 Form, as it is from these BLAST reports that Applicant became aware of many of the GenBank references cited on the enclosed PTO-1449 Form. Each BLAST report includes alignments of one of the CRSP/dkk nucleic acid or amino acid sequences

of the invention with various "hits" from the GenBank EST, non-redundant nucleic acid or non-redundant protein database. Applicant suggests that the above information should adequately assist the Examiner in considering references A18 -M6, and M19-N10, and respectfully requests that all of the references be considered.

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, Applicant understands that the Examiner will make an independent evaluation of the cited publications.

Under 37 C.F.R. § 1.97(b)(3), no additional costs are believed to be due in connection with the filing of this disclosure. If, however, a first Office Action on the merits issues in this application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee as required under 37 CFR §1.17(p) to our Deposit Order Account No. 12-0080.

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP

  
DeAnn F. Smith, Esq.  
Registration No. 36,683  
Attorney for Applicant

28 State Street  
Boston, MA 02109  
(617) 227-7400

Date: April 6, 2001  
GAD/AEM/DFS/JKR/alf  
Enclosures



LAHIVE  
&  
COCKFIELD  
L L P

COUNSELLORS AT LAW  
28 STATE STREET  
BOSTON, MASSACHUSETTS 02109-1784  
TELEPHONE (617) 227-7400  
FAX (617) 742-4214  
lc@lahcoc.com

JOHN A. LAHIVE, JR. (1928-1997)  
THOMAS V. SMURZYNSKI  
RALPH A. LOREN  
GIULIO A. DeCONTI, JR.  
ANN LAMPORT HAMMITTE  
ELIZABETH A. HANLEY  
AMY BAKER MANDRAGOURAS  
ANTHONY A. LAURENTANO  
KEVIN J. CANNING  
JANE E. REMILLARD  
DeANN FORAN SMITH  
JEANNE M. DIGIORGIO  
DEBRA J. MILASINCIC, Ph.D.  
NICHOLAS P. TRIANO, III  
CHI SUK KIM  
DAVID J. RIKKERS  
DAVID R. BURNS

JOHN S. CURRAN  
SEAN D. DETWEILER  
ADAM M. GOODMAN  
CYNTHIA L. KANIK, Ph.D.  
MEGAN E. WILLIAMS, Ph.D.  
RICHA NAND

SENIOR COUNSEL  
JAMES E. COCKFIELD

OF COUNSEL  
JEREMIAH LYNCH  
WILLIAM A. SCOFIELD, JR.  
PETER C. LAURO \*

PATENT AGENTS  
PETER S. STECHER

0360  
TECHNICAL SPECIALISTS  
MARIA LACCOTRIPE ZACHARAKIS, Ph.D. \*\*  
CYNTHIA M. SOROOS  
PETER W. DINI, Ph.D.  
EUIHOON LEE  
LISA M. DiROCCO  
JENNIFER K. ROSENFELD  
JUDITH STONE-HULSLANDER, Ph.D.  
ALLAN TAMESHTIT, Ph.D.  
CATHERINE E. McPHERSON  
ERIC F. WAGNER, Ph.D.  
SHAHID HASAN, Ph.D.  
ASHITA DOSHI, Ph.D.  
JACOB G. WEINTRAUB

\* Admitted in NY only  
\*\* Passed the Patent Bar Examination

April 6, 2001

Commissioner for Patents  
Washington, D.C. 20231

Re: U.S. Patent Application No.: 09/263,022  
Title: *NOVEL HUMAN DICKKOPF-RELATED PROTEIN AND  
NUCLEIC ACID MOLECULES AND USES THEREFOR*  
Inventor: Sean A. McCarthy  
Filed: March 5, 1999  
Our Ref. No.: MNI-108CP2

Dear Sir:

I enclose herewith for filing in the above-identified application the following:

1. Information Disclosure Statement;
2. PTO Form 1449;
3. Full copies of references (270) cited in PTO Form 1449; and
4. A Return Postcard.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any necessary fees in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

|  |
|--|
| I hereby certify that this correspondence is deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on: |
| <u>April 6, 2001</u><br>Date   |
| <u>DeAnn F. Smith</u><br>DeAnn F. Smith, Reg. No. 36,683   |

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP

DeAnn F. Smith  
DeAnn F. Smith  
Registration No. 36,683  
Attorney for Applicant

APPLICANT FACSIMILE OF FORM PTO-1449

REV 7-80

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

MNI-108CP2

09/263,022

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

APPLICANT

Sean A. McCarthy

FILING DATE

March 5, 1999

GROUP

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE    | NAME                 | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|---------------------|----|-----------------|---------|----------------------|-------|----------|-------------------------------|
|                     | A1 | 5,168,050       | 12/1992 | Hammonds, Jr. et al. | 435   | 69.1     |                               |
|                     | A2 | 5,525,486       | 6/1996  | Honjo et al.         | 435   | 69.1     |                               |

## FOREIGN PATENT DOCUMENTS

|  |     | DOCUMENT NUMBER | DATE    | COUNTRY | CLASS | SUBCLASS | TRANSLATION |    |
|--|-----|-----------------|---------|---------|-------|----------|-------------|----|
|  |     |                 |         |         |       |          | YES         | NO |
|  | A3  | WO 98/27932     | 7/1998  | PCT     |       |          |             |    |
|  | A4  | WO 98/46755     | 10/1998 | PCT     |       |          |             |    |
|  | A5  | WO 99/03990     | 3/1999  | PCT     |       |          |             |    |
|  | A6  | WO 99/06549     | 2/1999  | PCT     |       |          |             |    |
|  | A7  | WO 99/14328     | 1/1999  | PCT     |       |          |             |    |
|  | A8  | WO 99/22000     | 5/1999  | PCT     |       |          | Abstract    |    |
|  | A9  | WO 99/31236     | 6/1999  | PCT     |       |          |             |    |
|  | A10 | WO 00/18194     | 3/2000  | PCT     |       |          | Abstract    |    |

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

|  |     |   |
|--|-----|---|
|  | A11 | Aravind, L. and E.V. Koonin, "A colipase fold in the carboxy-terminal domain of the Wnt antagonists—the Dickkopfs", <i>Curr. Biol.</i> 8(14):R477-8 (1998)                                    |
|  | A12 | Austin, T.W. et al., "A role for the Wnt gene family in hematopoiesis: Expansion of multilineage progenitor cells", <i>Blood</i> 89(10):3624-3635 (1997)                                      |
|  | A13 | Barton, "Protein sequence alignment and database scanning" in <i>Protein Structure Prediction, A Practical Approach</i> (IRL Press, Oxford University Press, Oxford, UK, Jan. 1997) pp. 31-63 |
|  | A14 | Bowie et al. "Deciphering the message in protein sequences: tolerance to amino acid substitutions" <i>Science</i> 247(4948):1306-10 (Mar. 16, 1990)   |
|  | A15 | Cadigan, K.M et al., "Wnt signaling: A common theme in animal development", <i>Genes &amp; Development</i> 11:3286-3305 (1997)  |
|  | A16 | Fedi, P. et al., "Isolation and biochemical characterization of the human Dkk-1 homologue, a novel inhibitor of mammalian Wnt signaling", <i>J. Biol. Chem.</i> 274(27):19465-19472 (1999)    |
|  | A17 | Finch, Paul W. et al. "Purification and molecular cloning of a secreted, Frizzled-related antagonist of Wnt action" <i>Proc. Natl. Acad. Sci. USA</i> 94(13):6770-75 (June 1997)              |
|  | A18 | GenBank™ Accession Number 2724106 for RIG-like 7-1 [Homo sapiens][4 Dec. 1997]  |
|  | A19 | GenBank™ Accession Number 2736292 for mdck-1 [Mus musculus][10 Feb. 1998]   |
|  | A20 | GenBank™ Accession Number 2736294 for Xdkk-1 [Xenopus laevis][10 Feb. 1998]   |
|  | A21 | GenBank™ Accession Number 3660556 for hdkk-4 [Homo sapiens][3 Oct. 1998]  |

Examiner

Date Considered

\*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



APPLICANT FACSIMILE OF FORM PTO-1449

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

REV 7-80

**MNI-108CP2****09/263,022****LIST OF PUBLICATIONS CITED BY APPLICANT**  
(Use several sheets if necessary)

APPLICANT

**Sean A. McCarthy**

FILING DATE

**March 5, 1999**

GROUP

**OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)**

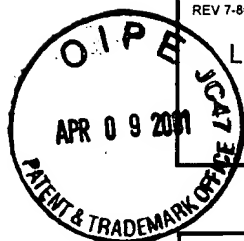
|     |  |
|-----|--|
| B1  | GenBank™ Accession Number 3688630 for hdkk-4 [Homo sapiens][3 Oct. 1998]   |
| B2  | GenBank™ Accession Number A39976 for Sequence 9 from Patent WO942179 [5 March 1997]  |
| B3  | GenBank™ Accession Number AA018255 for Soares retina N2b4HR homo sapiens cDNA clone 361535 5', mRNA sequence [29 Nov. 1996]  |
| B4  | GenBank™ Accession Number AA031969 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone 470646 3', mRNA sequence [21 Aug. 1996]  |
| B5  | GenBank™ Accession Number AA032060 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:470646 5', mRNA sequence [21 Aug. 1996]  |
| B6  | GenBank™ Accession Number AA035345 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:471479 3', mRNA sequence [10 May 1997]   |
| B7  | GenBank™ Accession Number AA035443 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:471724 3', mRNA sequence [10 May 1997]   |
| B8  | GenBank™ Accession Number AA035583 for Soares_pregnant_uterus_NbHPU Homo sapiens clone IMAGE:471724 5', mRNA sequence [10 May 1997]  |
| B9  | GenBank™ Accession Number AA037322 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone 325915 5', mRNA sequence [25 Nov. 1996]  |
| B10 | GenBank™ Accession Number AA041360 for Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone 376472 3', mRNA sequence [1 Feb. 1997]   |
| B11 | GenBank™ Accession Number AA042806 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486515 3', mRNA sequence [4 Sept. 1996]  |
| B12 | GenBank™ Accession Number AA043027 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486515 5', mRNA sequence [4 Sept. 1996]  |
| B13 | GenBank™ Accession Number AA063859 for Stratagene mouse testis (#937309) Mus musculus cDNA clone 514640 5' similar to TR:G517093 G517093 HYPOTHETICAL 39.2 KD PROTEIN; mRNA sequence [3 Feb. 1997]       |
| B14 | GenBank™ Accession Number AA065307 for Testis 5 Homo sapiens cDNA clone a03500 5' end, mRNA sequence [31 Dec. 1996]  |
| B15 | GenBank™ Accession Number AA073904 for Stratagene mouse heart (#937316) Mus musculus cDNA clone 536577 5', mRNA sequence [15 Feb. 1997]  |
| B16 | GenBank™ Accession Number AA088618 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:487642 5', mRNA sequence [24 Oct. 1996]  |
| B17 | GenBank™ Accession Number AA107210 for Stratagene mouse testis (#937308) Mus musculus cDNA clone IMAGE:516168 5' similar to TR:G517093 G517093 HYPOTHETICAL 39.2 kd protein; mRNA sequence [3 Feb. 1997] |
| B18 | GenBank™ Accession Number AA115249 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:501425 3', mRNA sequence [14 May 1997]   |
| B19 | GenBank™ Accession Number AA115337 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone 501425 5', mRNA sequence [14 May 1997]   |
| B20 | GenBank™ Accession Number AA129488 for Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:564360 3', mRNA sequence [19 May 1997]   |

Examiner

Date Considered

**\*EXAMINER:**

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



APPLICANT FACSIMILE OF FORM PTO-1449

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

REV 7-80

MNI-108CP2

09/263,022

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

APPLICANT

Sean A. McCarthy

FILING DATE

March 5, 1999

GROUP

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

|     |   |
|-----|---|
| C1  | GenBank™ Accession Number AA136192 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:490113 5', mRNA sequence [30 Nov. 1996]   |
| C2  | GenBank™ Accession Number AA137219 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:490113 3', mRNA sequence [30 Nov. 1996]   |
| C3  | GenBank™ Accession Number AA143670 for Stratagaene pancreas (#937208) Homo sapiens cDNA clone IMAGE:591770 5', mRNA sequence [4 Dec. 1996]  |
| C4  | GenBank™ Accession Number AA155928 for Stratagene endothelial cell 937223 Homo sapiens cDNA clone 590026 5', mRNA sequence [11 Dec. 1996]   |
| C5  | GenBank™ Accession Number AA207078 for NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:682716 5', mRNA sequence [13 Aug. 1997]  |
| C6  | GenBank™ Accession Number AA209468 for Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648310 3', mRNA sequence [12 March 1998]   |
| C7  | GenBank™ Accession Number AA220766 for Soares mouse 3NME12 5 Mus musculus cDNA clone IMAGE:660068 5', mRNA sequence [10 Feb. 1997]  |
| C8  | GenBank™ Accession Number AA237194 for Soares mouse NML Mus musculus cDNA clone IMAGE:678567 5' similar to gb:U11248 Mus musculus C57BL/6J ribosomal protein S28 mRNA, complete (MOUSE), mRNA sequence [3 March 1997]       |
| C9  | GenBank™ Accession Number AA253446 for Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:669375 5', mRNA sequence [12 March 1997]  |
| C10 | GenBank™ Accession Number AA253464 for Soares_NhHMPu_S1 Homo sapiens cDNA clone 669375 3', mRNA sequence [12 March 1997]  |
| C11 | GenBank™ Accession Number AA259742 for Soares mouse 3NME12 5 Mus musculus cDNA clone IMAGE:734543 5' similar to gb:U11248 Mus musculus C57BL/6J ribosomal protein S28 mRNA, complete (MOUSE), mRNA sequence [18 March 1997] |
| C12 | GenBank™ Accession Number AA265561 for Soares mouse lymph node NbMLN Mus musculus cDNA clone 718668 5' similar to TR:G517093 G517093 HYPOTHETICAL 39.2 KD PROTEIN; mRNA sequence [20 March 1997]                            |
| C13 | GenBank™ Accession Number AA269333 for Soares mouse 3NME12 5 Mus musculus cDNA clone IMAGE:733911 5', mRNA sequence [26 March 1997]   |
| C14 | GenBank™ Accession Number AA273430 for Soares mouse lymph node NbMLN Mus musculus cDNA clone IMAGE:764999 5, mRNA sequence [28 March 1997]  |
| C15 | GenBank™ Accession Number AA292828 for Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727099 5', mRNA sequence [12 Aug. 1997]  |
| C16 | GenBank™ Accession Number AA304984 for Colon carcinoma (Caco-2) cell line II Homo sapiens cDNA 5' end, mRNA sequence [18 April 1997]  |
| C17 | GenBank™ Accession Number AA336797 for Endometrial tumor Homo sapiens cDNA 5' end, mRNA sequence [21 April 1997]  |
| C18 | GenBank™ Accession Number AA351624 for Infant brain Homo sapiens cDNA 5' end similar to RIG, mRNA sequence [21 April 1997]  |
| C19 | GenBank™ Accession Number AA371363 for Prostate gland I Homo sapiens cDNA 5' end, mRNA sequence [21 April 1997]   |

Examiner

Date Considered

\*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



APPLICANT FACSIMILE OF FORM PTO-1449

REV 7-80

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

MNI-108CP2

SERIAL NO.

09/263,022

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

APPLICANT

Sean A. McCarthy

FILING DATE

March 5, 1999

GROUP

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

|     |   |
|-----|---|
| D1  | GenBank™ Accession Number AA393069 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727624 5', mRNA sequence [12 Aug. 1997]  |
| D2  | GenBank™ Accession Number AA397836 for Soares_testis_NHT Homo sapiens cDNA clone 728407 5' similar to TR:G517093 G517093 HYPOTHETICAL 39.2 KD PROTEIN; mRNA sequence [16 May 1997]  |
| D3  | GenBank™ Accession Number AA402127 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727430 5', mRNA sequence [12 Aug. 1997]  |
| D4  | GenBank™ Accession Number AA405079 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:731664 5', mRNA sequence [12 Aug. 1997]  |
| D5  | GenBank™ Accession Number AA425947 for Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone 760299 3', mRNA sequence [16 Oct. 1997]   |
| D6  | GenBank™ Accession Number AA426107 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743011 5', mRNA sequence [16 Oct. 1997]  |
| D7  | GenBank™ Accession Number AA431512 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:782156 5', mRNA sequence [22 May 1997]   |
| D8  | GenBank™ Accession Number AA497850 for Stratagene mouse testis (#937308) Mus musculus cDNA clone 917486 5' similar to TR:G517093 G517093 HYPOTHETICAL 39.2 KD PROTEIN; mRNA sequence [1 July 1997]  |
| D9  | GenBank™ Accession Number AA497886 for Stratagene mouse testis (#937308) Mus musculus cDNA clone 917858 5' similar to TR:G517093 G517093 HYPOTHETICAL 39.2 KD PROTEIN; mRNA sequence [1 July 1997]  |
| D10 | GenBank™ Accession Number AA522097 for Barstead mouse proximal colon MPLRB6 Mus musculus cDNA clone IMAGE:903996 5' similar to gb:U11248 Mus musculus C57BL/6J ribosomal protein S28 mRNA, complete (MOUSE), mRNA sequence [17 July 1997] |
| D11 | GenBank™ Accession Number AA528575 for NCI_CGAP_Kid1 Homo sapiens cDNA clone IMAGE:912545 similar to SW:RL37_HUMAN PO2403 60S RIBOSOMAL PROTEIN L37, mRNA sequence [20 August 1997]   |
| D12 | GenBank™ Accession Number AA538551 for Knowles Solter mouse blastocyst B1 Mus musculus cDNA clone IMAGE:932825 5' similar to gb:U11248 Mus musculus C57BL/6J ribosomal protein S28 mRNA, complete (MOUSE), mRNA sequence [29 July 1997]   |
| D13 | GenBank™ Accession Number AA565546 for NCI_CGAP_GC2 Homo sapiens cDNA clone IMAGE:1016173 3', mRNA sequence [8 Sept. 1997]  |
| D14 | GenBank™ Accession Number AA616966 for Barstead mouse proximal colon MPLRB6 Mus musculus cDNA clone IMAGE:904368 5', mRNA sequence [7 Oct. 1997]  |
| D15 | GenBank™ Accession Number AA619642 Knowles Solter mouse blastocyst B1 Mus musculus cDNA clone IMAGE:962896 5' similar to TR:G517093 G517093 HYPOTHETICAL 39.2 KD PROTEIN, mRNA sequence [9 Oct. 1997]                                     |
| D16 | GenBank™ Accession Number AA628979 for Soares testis NHT Homo sapiens cDNA clone 743604 3' similar to TR:G517093 G517093 HYPOTHETICAL 39.2 KD PROTEIN; mRNA sequence [16 Oct. 1997]   |
| D17 | GenBank™ Accession Number AA641247 for NCI_CGAP_Pr24 Homo sapiens cDNA clone IMAGE:1173698 3', mRNA sequence [27 Oct. 1997]   |

Examiner

Date Considered

\*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.





APPLICANT FACSIMILE OF FORM PTO-1449

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

REV 7-80

MNI-108CP2

09/263,022

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

APPLICANT

Sean A. McCarthy

FILING DATE

March 5, 1999

GROUP

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

|   |   |
|---|---|
| E1  | GenBank™ Accession Number AA653979 for NCI_CGAP_Pr25 Homo sapiens cDNA clone IMAGE:1198589 3', mRNA sequence [13 Nov. 1997]   |
| E2  | GenBank™ Accession Number AA689611 for Barstead mouse irradiated colon MPLRB7 Mus musculus cDNA clone IMAGE:1137654 5', mRNA sequence [16 Dec. 1997]  |
| E3  | GenBank™ Accession Number AA691908 for Barstead mouse myotubes MPLRB5 Mus musculus cDNA clone 1163091 5' similar to gb:U11248 Mus musculus C57BL/6J ribosomal protein S28 mRNA, complete (MOUSE) [16 Dec. 1997] |
| E4  | GenBank™ Accession Number AA692959 for Knowles Solter mouse 2 cell Mus musculus cDNA clone 1125007 5', mRNA sequence [16 Dec. 1997]   |
| E5  | GenBank™ Accession Number AA693679 for Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:434242 3', mRNA sequence [16 Dec. 1997]   |
| E6  | GenBank™ Accession Number AA710868 for Barstead mouse irradiated colon MPLRB7 Mus musculus cDNA clone IMAGE:1166873 5', mRNA sequence [24 Dec. 1997]  |
| E7  | GenBank™ Accession Number AA731642 for NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1251357 3', mRNA sequence [27 Jan. 1998]   |
| E8  | GenBank™ Accession Number AA741294 for NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1286515 3' similar to SW:ANP2_AUSBR P12101 ANTIFREEZE PEPTIDE AB2. [1], mRNA sequence [7 Feb. 1998]                          |
| E9  | GenBank™ Accession Number AA765298 for NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1303697 3', mRNA sequence [8 Feb. 1998]  |
| E10   | GenBank™ Accession Number AA770231 Soares_testis_NHT Homo sapiens cDNA clone 1322151 3', mRNA sequence [28 Jan. 1998]   |
| E11   | GenBank™ Accession Number AA774161 for Stratagene hNT neuron (#937233) Homo sapiens cDNA clone IMAGE:858573 3', mRNA sequence [29 Jan. 1998]  |
| E12   | GenBank™ Accession Number AA815342 Soares_testis_NHT Homo sapiens cDNA clone 1375447 3', mRNA sequence [13 Feb. 1998]   |
| E13   | GenBank™ Accession Number AA826797 for NCI_CGAP_Pr24 Homo sapiens cDNA clone IMAGE:1174528 3', mRNA sequence [5 March 1998]   |
| E14   | GenBank™ Accession Number AA854987 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1394074 3', mRNA sequence [6 March 1998]   |
| E15   | GenBank™ Accession Number AA868111 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1407610 3' similar to contain element MSR1 repetitive element, mRNA sequence [16 March 1998]                                 |
| E16   | GenBank™ Accession Number AA991644 for NCI_CGAP_GC2 Homo sapiens cDNA clone IMAGE:1612003 3', mRNA sequence [3 June 1998]   |
| E17   | GenBank™ Accession No. AAB92664 for RIG-like 7-1 [28 Dec. 1997]   |
| E18   | GenBank™ Accession No. AAC02426 for mdck-1 [10 Feb. 1998]   |
| E19   | GenBank™ Accession No. AAC02427 for Xdkk-1 [10 Feb. 1998]   |
| Examiner  |   |
| Date Considered   |   |
| *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |   |



APPLICANT FACSIMILE OF FORM PTO-1449

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

REV 7-80

**MNI-108CP2****09/263,022****LIST OF PUBLICATIONS CITED BY APPLICANT**  
(Use several sheets if necessary)

APPLICANT

**Sean A. McCarthy**

FILING DATE

**March 5, 1999**

GROUP

**OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)**

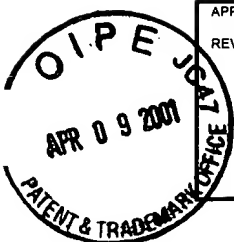
|     |  |
|-----|--|
| F1  | GenBank™ Accession No. AAD21087 for Sk/Dkk-1 protein precursor [29 June 1999]  |
| F2  | GenBank™ Accession No. AAD22461 for dickkopf-1 [31 March 1999]   |
| F3  | GenBank™ Accession No. AAF02674 for dickkopf-1 [16 Oct. 1999]  |
| F4  | GenBank™ Accession No. AAF02675 for dickkopf-2 [16 Oct. 1999]  |
| F5  | GenBank™ Accession No. AAF02676 for dickkopf-3 [16 Oct. 1999]  |
| F6  | GenBank™ Accession No. AAF02677 for dickkopf-4 [16 Oct. 1999]  |
| F7  | GenBank™ Accession No. AAF02678 for soggy-1 protein [16 Oct. 1999]   |
| F8  | GenBank™ Accession No. AAF02679 for soggy-1 protein [16 Oct. 1999]   |
| F9  | GenBank™ Accession No. AAF02680 for Dkk-3 protein [16 Oct. 1999]   |
| F10 | GenBank™ Accession Number AB003095 for Fruitfly strain SI259 mitochondrial DNA, A+T-rich region, partial sequence [17 Sept. 1997]                          |
| F11 | GenBank™ Accession Number AB003097 for Fruitfly strain g20 mitochondrial DNA, A+T-rich region, partial sequence [17 Sept. 1997]                            |
| F12 | GenBank™ Accession Number AB005216 for Homo sapiens mRNA for Nck, Ash and phospholipase C gamma-binding protein NAP4, partial cds [14 Nov. 1997]           |
| F13 | GenBank™ Accession No. AB017788 for Homo sapiens hdkk-4 mRNA, complete cds. [3 Oct. 1998]  |
| F14 | GenBank™ Accession No. AB018003 for Homo sapiens hdkk-4 gene, exon-1, partial sequence [3 Oct. 1998]   |
| F15 | GenBank™ Accession No. AB018004 for Homo sapiens hdkk-4 gene, exon-2 [3 Oct. 1998]   |
| F16 | GenBank™ Accession No. AB018005 for Homo sapiens hdkk-4 gene, exon-3, exon-4 and complete cds. [3 Oct. 1998]   |
| F17 | GenBank™ Accession No. AB020314 for Homo sapiens Dickkopf-1 (hdkk-1- gene, exons, 1 <sup>st</sup> and 2 <sup>nd</sup> coding region [23 Nov. 1999]         |
| F18 | GenBank™ Accession No. AB020315 for Homo sapiens Dickkopf-1 (hdkk-1) gene, 3 <sup>rd</sup> , 4 <sup>th</sup> coding region and complete cds [23 Nov. 1999] |
| F19 | GenBank™ Accession No. AB033208 for Homo sapiens dickkopf-2 mRNA, complete cds. [20 Oct. 1999]   |
| F20 | GenBank™ Accession No. AB033421 for Homo sapiens dickkopf-3 mRNA, complete cds. [20 Oct. 1999]   |
| F21 | GenBank™ Accession No. AB035180 for Homo sapiens Dickkopf-2 gene, exon [27 Nov. 1999]  |

Examiner

Date Considered

**\*EXAMINER:**

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



APPLICANT FACSIMILE OF FORM PTO-1449

REV 7-80

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

MNI-108CP2

09/263,022

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

APPLICANT

Sean A. McCarthy

FILING DATE

March 5, 1999

GROUP

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

|     |  |
|-----|--|
| G1  | GenBank™ Accession No. AB035181 for Homo sapiens Dickkopf-2 gene, exon and partial cds. [27 Nov. 1999]                                   |
| G2  | GenBank™ Accession No. AB035182 for Homo sapiens Dickkopf-3 gene, partial cds. [27 Nov. 1999]  |
| G3  | GenBank™ Accession Number AC000127 for Human Cosmid g1572c198, complete sequence [3 Feb. 1997]   |
| G4  | GenBank™ Accession Number AC001235 for Human Chromosome 11 pac pDJ360p17; HTGS phase 1, 44 unordered pieces [18 April 1997]              |
| G5  | GenBank™ Accession Number AC003099 for Homo sapiens chromosome 4q25, BAC clone B284B3, complete sequence [13 Nov. 1997]                  |
| G6  | GenBank™ Accession Number AF009075 for Hepatitis C virus genomic RNA, 3' nontranslated region, partial sequence. clone #16 [9 Aug. 1997] |
| G7  | GenBank™ Accession Number AF021106 for Homo sapiens trinucleotide repeat CTG-11, sequence tagged site [4 April 1998]                     |
| G8  | GenBank™ Accession Number AF030155 for Drosophila melanogaster translation initiation factor eIF4G mRNA, complete cds [17 April 1998]    |
| G9  | GenBank™ Accession Number AF030433 for Mus musculus Dickkopf-1 (mdkk-1) mRNA, complete cds [11 Feb. 1998]                                |
| G10 | GenBank™ Accession Number AF030434 for Xenopus laevis Dickkopf-1 (Xdck-1) mRNA, complete cds [11 Feb. 1998]                              |
| G11 | GenBank™ Accession Number AF034208 for Homo sapiens RIG-like 7-1 mRNA, complete cds [29 Dec. 1997]                                       |
| G12 | GenBank™ Accession Number AF052685 for Homo sapiens protocadherin 43 gene, exon 3, exon 4, and complete cds. [29 March 1998]             |
| G13 | GenBank™ Accession No. AF116852 for Danio rerio dickkopf-1 (dck1) mRNA, complete cds. [31 March 1999]                                    |
| G14 | GenBank™ Accession No. AF127563 for Homo sapiens Sk/Dkk-1 protein precursor, mRNA, complete cds. [29 June 1999]                          |
| G15 | GenBank™ Accession No. AF177394 for Homo sapiens dickkopf-1 (DKK-1) mRNA; complete cds. [16 Oct. 1999]                                   |
| G16 | GenBank™ Accession No. AF177395 for Homo sapiens dickkopf-2 (DKK-2) mRNA, complete cds. [16 Oct. 1999]                                   |
| G17 | GenBank™ Accession No. AF177396 for Homo sapiens dickkopf-3 (DKK-3) mRNA, complete cds. [16 Oct. 1999]                                   |
| G18 | GenBank™ Accession No. AF177397 for Homo sapiens dickkopf-4 (DKK-4); mRNA, complete cds. [16 Oct. 1999]                                  |
| G19 | GenBank™ Accession No. AF177398 for Homo sapiens soggy-1 protein (SG-1) mRNA, complete cds. [16 Oct. 1999]                               |
| G20 | GenBank™ Accession No. AF177399 for Mus musculus soggy-1 protein (Sgy-1) mRNA, complete cds. [16 Oct. 1999]                              |
| G21 | GenBank™ Accession No. AF177400 for Mus musculus Dkk-3 protein (Dkk-3) mRNA, complete cds. [16 Oct. 1999]                                |

Examiner

Date Considered

\*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



APPLICANT FACSIMILE OF FORM PTO-1449

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

REV 7-80

MNI-108CP2

09/263,022

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

APPLICANT

Sean A. McCarthy

FILING DATE

March 5, 1999

GROUP

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

|     |   |
|-----|---|
| H1  | GenBank™ Accession Number AI004529 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1620926 3', mRNA sequence [27 Aug. 1998]   |
| H2  | GenBank™ Accession Number AI028601 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1644098 3', mRNA sequence [27 Aug. 1998]   |
| H3  | GenBank™ Accession Number AI037464 Soares mouse mammary gland NbMMG Mus musculus cDNA clone IMAGE:1381445 5' similar to SW:LFE4_CHICK Q90839 UNKNOWN LENS FIBER PROTEIN CLEFEST4 PRECURSOR, mRNA sequence [26 June 1998]                              |
| H4  | GenBank™ Accession Number AI066004 Stratagene mouse testis (#937308) Mus musculus cDNA clone IMAGE:515718 5' similar to TR:G517093 G517093 HYPOTHETICAL 39.2 kd protein, mRNA sequence [3 Feb. 1997]  |
| H5  | GenBank™ Accession Number AI074879 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE: 1667074 3', mRNA sequence [24 Sept. 1998]  |
| H6  | GenBank™ Accession Number AI085115 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE: 1665669 3', mRNA sequence [24 Sept. 1998]  |
| H7  | GenBank™ Accession Number AI093106 for Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:1694687 3', mRNA sequence [18 Aug. 1998]  |
| H8  | GenBank™ Accession Number AI095783 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1696830 3', mRNA sequence [5 Oct. 1998]   |
| H9  | GenBank™ Accession Number AI107210 Stratagene mouse testis (#937308) Mus musculus cDNA clone IMAGE:516168 5' similar to TR:G517093 G517093 HYPOTHETICAL 39.2 kd protein, mRNA sequence [24 Nov. 1998]   |
| H10 | GenBank™ Accession Number AI120461 for Soares mouse mammary gland NMLMG Mus musculus cDNA clone IMAGE:1383114 5' similar to gb:U11248 Mus musculus C57BL/6J ribosomal protein S28 mRNA, complete (MOUSE); mRNA sequence [Mus musculus] [2 Sept. 1998] |
| H11 | GenBank™ Accession Number AI128249 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1711454 3'; mRNA sequence [Homo sapiens] [27 Oct. 1998]   |
| H12 | GenBank™ Accession Number AI129651 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1712938 3', mRNA sequence [Homo sapiens][27 Oct. 1998]  |
| H13 | GenBank™ Accession Number AI129657 for Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1712950 3', mRNA sequence [Homo sapiens][27 Oct. 1998]  |
| H14 | GenBank™ Accession Number AI136880 for UI-R-C2p-of-f-01-0-UI.sl UI-R-C2p Rattus norvegicus cDNA clone UI-R-C2p-of-f-01-0-UI e', mRNA sequence [Rattus norvegicus][18 Sept. 1998]  |
| H15 | GenBank™ Accession Number AI138943 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1735666 3', mRNA sequence [28 Oct. 1998]   |
| H16 | GenBank™ Accession Number AI139919 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1737911 3' similar to SW:LFE4_CHICK Q90839 UNKNOWN LENS FIBER PROTEIN CLEFEST4 PRECURSOR, mRNA sequence [29 Oct. 1998]   |
| H17 | GenBank™ Accession Number AI146900 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:1666722 3', mRNA sequence [Homo sapiens][23 Oct. 1998]  |
| H18 | GenBank™ Accession Number AI150592 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752164 3', mRNA sequence [10 Nov. 1998]   |

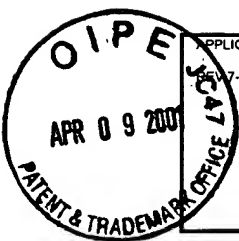
Examiner

Date Considered

\*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.





APPLICANT FACSIMILE OF FORM PTO-1449

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

**MNI-108CP2****09/263,022**

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

APPLICANT

**Sean A. McCarthy**

FILING DATE

**March 5, 1999**

GROUP

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

|  |     |   |
|--|-----|---|
|  | 11  | GenBank™ Accession Number AI200822 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755100 3', mRNA sequence [14 Oct. 1998]   |
|  | 12  | GenBank™ Accession Number AI200868 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1754662 3', mRNA sequence [14 Oct. 1998]   |
|  | 13  | GenBank™ Accession Number AI201865 for NCI_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:1944264 3', mRNA sequence [Homo sapiens][2 Dec. 1998]                                      |
|  | 14  | GenBank™ Accession Number AJ006866 for Orthochirus scrobiculosus mRNA for insecticidal toxin, partial [27 June 1998]  |
|  | 15  | GenBank™ Accession No. AJ243963 for Mus musculus mRNA for dickkopf-2 (dkk-2 gene) [4 Nov. 1999]   |
|  | 16  | GenBank™ Accession No. AJ243964 for Mus musculus mRNA for dickkopf-3 (dkk-3 gene) [4 Nov. 1999]   |
|  | 17  | GenBank™ Accession Number AU007007 Schizosaccharomyces pombe late log phase cDNA Schizosaccharomyces pombe cDNA clone spc01322, mRNA sequence [31 July 1998]                  |
|  | 18  | GenBank™ Accession Number AU007010 Schizosaccharomyces pombe late log phase cDNA Schizosaccharomyces pombe cDNA clone spc04811, mRNA sequence [31 July 1998]                  |
|  | 19  | GenBank™ Accession Number AU009349 Schizosaccharomyces pombe late log phase cDNA Schizosaccharomyces pombe cDNA clone spc01322, mRNA sequence [31 July 1998]                  |
|  | 110 | GenBank™ Accession Number B24434 for Arabidopsis thalia genomic clone F20C17, genomic survey sequence [9 Oct. 1997]   |
|  | 111 | GenBank™ Accession Number B39066 for Human Genomic Sperm Library C Homo sapiens genomic clone Plate=CT 771 Col=13 Row=C, genomic survey sequence [17 Oct. 1997]               |
|  | 112 | GenBank™ Accession No. BAA33475 for hdkk-4 [23 Nov. 1999]   |
|  | 113 | GenBank™ Accession No. BAA34651 for homologue of mouse dkk- gene:Acc# AF030433 [23 Nov. 1999]   |
|  | 114 | GenBank™ Accession No. BAA85465 for Dickkopf-2 [20 Oct. 1999]   |
|  | 115 | GenBank™ Accession No. BAA85488 for Dickkopf-3 [20 Oct. 1999]   |
|  | 116 | GenBank™ Accession No. BAA87044 for Dickkopf-3 [27 Nov. 1999]   |
|  | 117 | GenBank™ Accession No. BAA87056 for Dickkopf-2 [27 Nov. 1999]   |
|  | 118 | GenBank™ Accession Number C89869 for Dictyostelium discoideum SS (H.Urushihara) Dictyostelium discoideum cDNA clone SSG557, mRNA sequence [20 April 1998]                     |
|  | 119 | DDBJ™ (DNA Database of Japan) Accession Number C94299 for Dictyostelium discoideum SS (H.Urushihara) Dictyostelium discoideum cDNA clone SSK759, mRNA sequence [15 June 1998] |
|  | 120 | GenBank™ Accession No. CAB60110 dickkopf-2 [4 Nov. 1999]  |
| Examiner   |     | Date Considered   |
| <p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p> |     |   |

APPLICANT FACSIMILE OF FORM PTO-1449

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

REV 7-80

MNI-108CP2

09/263,022

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

APPLICANT

Sean A. McCarthy

FILING DATE

March 5, 1999

GROUP

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

|   |   |
|---|---|
| J1  | GenBank™ Accession No. CAB60111 for dickkopf-3 [4 Nov. 1999]  |
| J2  | GenBank™ Accession Number D26311 for Chicken mRNA for unknown protein, complete cds [12 Dec. 1996]  |
| J3  | DDBJ™ (DNA Database of Japan)™ Accession Number D63286 for Clontech human placenta polyA+ mRNA (#6572) Homo sapiens cDNA clone 5' GEN-517H04 5', mRNA sequence [29 Aug. 1995] |
| J4  | GenBank™ Accession Number D67096 for Hepatitis C virus genome, 3' terminus [14 Aug. 1996]   |
| J5  | GenBank™ Accession Number D85016 for Non-A non-B hepatitis virus genomic RNA for 3' UTR [8 Oct. 1996]   |
| J6  | GenBank™ Accession Number D85017 for Non-A non-B hepatitis virus genomic RNA for 3' UTR [8 Oct. 1996]   |
| J7  | GenBank™ Accession Number D85020 for Non-A non-B hepatitis virus genomic RNA for 3' UTR [8 Oct. 1996]   |
| J8  | GenBank™ Accession Number D85021 for Non-A non-B hepatitis virus genomic RNA for 3' UTR [8 Oct. 1996]   |
| J9  | GenBank™ Accession Number D85022 for Non-A non-B hepatitis virus genomic RNA for 3' UTR [8 Oct. 1996]   |
| J10   | GenBank™ Accession Number D85024 for Non-A non-B hepatitis virus genomic RNA for 3' UTR [8 Oct. 1996]   |
| J11   | GenBank™ Accession Number D85025 for Non-A non-B hepatitis virus genomic RNA for 3' UTR [8 Oct. 1996]   |
| J12   | GenBank™ Accession Number F06027 Normalized infant brain cDNA Homo sapiens cDNA clone c-0ud06, mRNA sequence [19 Feb. 1995]   |
| J13   | GenBank™ Accession Number F08729 Normalized infant brain cDNA Homo sapiens cDNA clone c-15d12, mRNA sequence [20 Feb. 1995]   |
| J14   | GenBank™ Accession Number G05905 for human STS WI-6501 [19 Oct. 1995]   |
| J15   | GenBank™ Accession Number H71273 for Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 229921 5', mRNA sequence [26 Oct. 1995]  |
| J16   | GenBank™ Accession Number H83446 for Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:249345 3', mRNA sequence [13 Nov. 1995]  |
| J17   | GenBank™ Accession Number H83554 for Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:249345 5', mRNA sequence [13 Nov. 1995]  |
| J18   | GenBank™ Accession Number H99266 for Soares melanocyte 2NbHM Homo sapiens cDNA clone 260362 3', mRNA sequence [15 Dec. 1995]  |
| J19   | GenBank™ Accession Number I80064 for Sequence 37 from patent US 5708157 [20 March 1998]   |
| J20   | GenBank™ Accession Number L17318 for Rattus norvegicus proline-rich proteoglycan (PRG2) mRNA, complete cds [27 Oct. 1993]   |
| Examiner  |   |
| Date Considered   |   |
| *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |   |



APPLICANT FACSIMILE OF FORM PTO-1449

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

REV 7-80

**MNI-108CP2****09/263,022**LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

APPLICANT

**Sean A. McCarthy**

FILING DATE

**March 5, 1999**

GROUP

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

|     |   |
|-----|---|
| K1  | GenBank™ Accession Number L47975 Equus caballus TATA-box binding protein (TBP) gene, partial cds [1 April 1996]   |
| K2  | GenBank™ Accession Number L49359 Homo sapiens huntingtin gene, partial exon [19 Jan. 1996]  |
| K3  | GenBank™ Accession Number M29111 for D.discoideum actin A-2-sub-2 gene, 5' flank [15 March 1990]  |
| K4  | GenBank™ Accession Number M29121 for D.discoideum actin A-11 gene, 5' flank [15 March 1990]   |
| K5  | GenBank™ Accession Number M32514 Rat simple sequence DNA, clone 5 [15 Sept. 1990]   |
| K6  | GenBank™ Accession Number M32515 Rat simple sequence DNA, clone 8 [15 Sept. 1990]   |
| K7  | GenBank™ Accession Number M36626 Rat simple sequence DNA, clone 5 [15 Sept. 1990]   |
| K8  | GenBank™ Accession Number M64793 M36414 for Rat salivary proline-rich protein (RP15) gene, complete cds [9 May 1991]  |
| K9  | GenBank™ Accession Number M95930 for Manihot esculenta (clone rubssr37) ribulose-1, 5-bisphosphate carboxylase/oxygenase small subunit EC 4.1.1.39 (rbc S) mRNA sequence [26 June 1992]                                 |
| K10 | GenBank™ Accession Number M98807 for Xenopus laevis noggin mRNA, complete cds [14 Oct. 1992]  |
| K11 | GenBank™ Accession Number N26884 for Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:269713 3', mRNA sequence [29 Dec. 1995]  |
| K12 | GenBank™ Accession Number N94525 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone 309678 3', mRNA sequence [20 Aug. 1996]   |
| K13 | GenBank™ Accession Number P18563 for integrin subunit Beta 6 [Cavia porcellus][15 July 1999]  |
| K14 | GenBank™ Accession Number Q90839 Unknown lens fiber protein CLFEST4 precursor [1 Nov. 1997]   |
| K15 | GenBank™ Accession Number R14945 for Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:30231 5', mRNA sequence [13 April 1995]   |
| K16 | GenBank™ Accession Number R27865 for Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:133741 5', mRNA sequence [25 April 1995]   |
| K17 | GenBank™ Accession Number R32328 for Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:134911 3' similar to gb:X70218 PROTEIN PHOSPHATASE PP-X (HUMAN); contains L1 repetitive element, mRNA sequence [28 April 1995] |
| K18 | GenBank™ Accession Number R52311 for Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:39710 5', mRNA sequence [18 May 1995]   |
| K19 | GenBank™ Accession Number R54473 for Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:39710 3', mRNA sequence [18 May 1995]   |
| K20 | GenBank™ Accession Number T02494 for Debopam Chakrabarti Plasmodium falciparum cDNA clone PF0093C, mRNA sequence [Plasmodium falciparum] [26 May 1992]  |

Examiner

Date Considered

\*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



APPLICANT FACSIMILE OF FORM PTO-1449

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

REV 7-80

MNI-108CP2

09/263,022

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

APPLICANT

Sean A. McCarthy

FILING DATE

March 5, 1999

GROUP

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

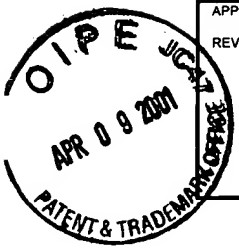
|     |   |
|-----|---|
| L1  | GenBank™ Accession Number U32331 for Homo sapiens RIG mRNA, complete cds [17 Sept. 1998]  |
| L2  | GenBank™ Accession Number U38801 for Rattus norvegicus high molecular weight DNA polymerase beta (rnpolb) mRNA, complete cds [21 May 1996]  |
| L3  | GenBank™ Accession Number U83980 for Oncorhynchus mykiss cytochrome c oxidase subunit VIa mRNA, complete cds. [31 May 1997]   |
| L4  | GenBank™ Accession Number V00185 J01268 for Slime mold (D. discoideum) gene for actin 2 sub2 [6 July 1989]  |
| L5  | GenBank™ Accession Number W10587 Soares mouse p3NMF19.5 Mus musculus cDNA clone IMAGE:313054 5', mRNA sequence [01 Oct. 1997]   |
| L6  | GenBank™ Accession Number W30750 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:309678 5', mRNA sequence [20 Aug. 1996]   |
| L7  | GenBank™ Accession Number W39572 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone 322829 5', mRNA sequence [10 Oct. 1996]   |
| L8  | GenBank™ Accession Number W39690 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:322977 5', mRNA sequence [10 Oct. 1996]   |
| L9  | GenBank™ Accession Number W45045 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA IMAGE:clone 322981 3', mRNA sequence [10 Oct. 1996]   |
| L10 | GenBank™ Accession Number W45126 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone 322864 3', mRNA sequence [10 Oct. 1996]   |
| L11 | GenBank™ Accession Number W46824 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:324601 3', mRNA sequence [23 May 1996]  |
| L12 | GenBank™ Accession Number W46873 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:324601 5', mRNA sequence [23 May 1996]  |
| L13 | GenBank™ Accession Number W51876 for Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone 324400 3', mRNA sequence [25 Nov. 1996]   |
| L14 | GenBank™ Accession Number W55979 for Soares_senescent_fibroblasts_NBhh19w Homo sapiens cDNA clone 340680 5', mRNA sequence [15 Oct. 1996]   |
| L15 | GenBank™ Accession Number W61032 for Soares_senescent_fibroblasts_NBHSF Homo sapiens cDNA clone 326135 5' similar to contains element MER22 repetitive element; mRNA sequence [11 Oct. 1996]  |
| L16 | GenBank™ Accession Number W61716 for Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone IMAGE:372542 5' similar to gb:U01317_cds4 HEMOGLOBIN DELTA CHAIN (HUMAN); gb:V00722 Mouse gene for beta-1-globin (MOUSE) [7 June 1996] |
| L17 | GenBank™ Accession Number W72126 for Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone 345970 3', mRNA sequence [17 Oct. 1996]   |
| L18 | GenBank™ Accession Number W79975 for Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 402616 5', mRNA sequence [25 June 1996]  |
| L19 | GenBank™ Accession Number X78612 for G.gallus genomic DNA repeat region, clone 12F6 [6 April 1994]  |
| L20 | GenBank™ Accession Number Z31224 Mouse testis t-ZAP Mus musculus cDNA, mRNA sequence [24 Jan. 1995]   |

Examiner

Date Considered

\*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.





APPLICANT FACSIMILE OF FORM PTO-1449

REV 7-80

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK  
OFFICE

ATTY DOCKET NO

SERIAL NO.

MNI-108CP2

09/263,022

APPLICANT

Sean A. McCarthy

FILING DATE

March 5, 1999

GROUP

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

|   |  |
|---|--|
| M1  | GenSeq™ Accession Number V38798 for Homo sapiens cerebellum and embryo specific protein [9 Nov. 1998]  |
| M2  | GenSeq™ Accession Number X22249 for Human secreted protein gene 39 clone HPMBZ15 [18 May 1999]   |
| M3  | GenSeq™ Accession Number X51459 for Human secreted protein 5' EST SEQ ID NO:38 [21 June 1999]  |
| M4  | GenSeq™ Accession Number X52255 for Protein PRO295 cDNA clone DNA38268-1188 [25 June 1999]   |
| M5  | GenSeq™ Accession Number X56830 for Human phdkk-2 cDNA [14 July 1999]  |
| M6  | GenSeq™ Accession Number X97746 for Extended human secreted protein coding sequence, SEQ ID NO:311 [13 Sept. 1999]   |
| M7  | George et al. "Current methods in sequence comparison and analysis" in <i>Macromolecular Sequencing and Synthesis Selected Methods and Applications</i> (D.H. Schlesinger, ed., Alan R. Liss, Inc., New York, NY, March 1988) pp. 127-49 |
| M8  | Glinka, Andrei et al. "Dickkopf-1 is a member of a new family of secreted roteins and functions in head induction" <i>Nature</i> 391(6665):357-62 (Jan. 22, 1998)  |
| M9  | Grotewold, L. et al. "Expression pattern of <i>Dkk-1</i> during mouse limb development" <i>Mech. Dev.</i> 89:151-153 (1999)  |
| M10   | Klein R.D. et al. "Selection for genes encoding secreted proteins and receptors" <i>Pro. Natl. Acad. Sci. USA</i> 93:7108-7113 (1996)  |
| M11   | Krupnick, Valery E. et al. "Functional and structural diversity of the human Dickkopf gene family" <i>Gene</i> 238(2):301-13 (Oct. 1, 1999)  |
| M12   | Lennon et al. "The I.M.A.G.E. Consortium: an integrated molecular analysis of genomes and their expression" <i>Genomics</i> 33(1):151-52 (Apr. 1, 1996)  |
| M13   | Ligon, A.H. et al. "Identification of a novel gene product, <i>R/G</i> , that is down-regulated in human glioblastoma" <i>Oncogene</i> 14(9):1075-1081 (1997);   |
| M14   | Lodish et al. <i>Molecular Cell Biology</i> , 3 <sup>rd</sup> Edition (W.H. Freeman & Co., March 1995), p. 266.  |
| M15   | Monaghan, A.P. et al. " <i>Dickkopf</i> genes are co-ordinately expressed in mesodermal lineages", <i>Mech. Dev.</i> 87(1-2):45-56 (1999)  |
| M16   | Ngo et al. <i>The Protein Folding Problem and Tertiary Structure Prediction</i> (Merz & Le Grand Eds., Springer Derlag, 1994) pp. 433, 492-95  |
| M17   | Nusse, R. et al. "Wnt genes" <i>Cell</i> , 69:1073-1087 (1992)   |
| M18   | Parr, B.A. et al. "Wnt genes and vertebrate development" <i>Current Opinion in Genetics and Development</i> 4:523-528 (1994)   |
| M19   | Results of BLASTN Search of GenBank™ Non-Redundant EST Database (dbEST) using human CRSP-2 Nucleic Acid Sequence   |
| M20   | Results of BLASTN Search of GenBank™ Non-Redundant Nucleic Acid Database (nuc) using human CRSP-2 Nucleic Acid Sequence  |
| Examiner  |  |
| Date Considered   |  |
| *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |  |



APPLICANT FACSIMILE OF FORM PTO-1449

REV 7-80

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO

SERIAL NO.

MNI-108CP2

09/263,022

APPLICANT

Sean A. McCarthy

FILING DATE

March 5, 1999

GROUP

## LIST OF PUBLICATIONS CITED BY APPLICANT

(Use several sheets if necessary)

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

|  |   |
|--|---|
| N1   | Results of BLASTX Search of GenBank™ Non-Redundant Protein Database (prot) using human CRSP-2 Nucleic Acid Sequence   |
| N2   | Results of BLASTN Search of GenBank™ Non-Redundant EST Database (dbEST) using human CRSP-3 Nucleic Acid Sequence;   |
| N3   | Results of BLASTN Search of GenBank™ Non-Redundant Nucleic Acid Database (nuc) using human CRSP-3 Nucleic Acid Sequence;  |
| N4   | Results of BLASTX Search of GenBank™ Non-Redundant Protein Database (prot) using human CRSP-3 Nucleic Acid Sequence;  |
| N5   | Results of BLASTN Search of GenBank™ Non-Redundant EST Database (dbEST) using human CRSP-N Nucleic Acid Sequence;   |
| N6   | Results of BLASTN Search of GenBank™ Non-Redundant Nucleic Acid Database (nuc) using human CRSP-N Nucleic Acid Sequence;  |
| N7   | Results of BLASTX Search of GenBank™ Non-Redundant Protein Database (prot) using human CRSP-N Nucleic Acid Sequence;  |
| N8   | Results of BLASTN Search of GenBank™ Non-Redundant EST Database (dbEST) using human CRSP-4 Nucleic Acid Sequence;   |
| N9   | Results of BLASTN Search of GenBank™ Non-Redundant Nucleic Acid Database (nuc) using human CRSP-4 Nucleic Acid Sequence;  |
| N10  | Results of BLASTX Search of GenBank™ Non-Redundant Protein Database (prot) using human CRSP-4 Nucleic Acid Sequence;  |
| N11  | Sambrook et al. <u>Molecular Cloning: A Laboratory Manual</u> , Second Edition, Vol. 1, 2 & 3 (Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York, Nov. 1989) p. 9.5   |
| N12  | Sawada, K. et al. "Characterization of terminally differentiated cell state by categorizing cDNA clones derived from chicken lens fibers" <i>Intl. J. Dev. Biol.</i> 40:531-535 (1996)                                      |
| N13  | Tate, G. and T. Mitsuya, "Human Dickkopf as well as DAN Family Members, Cerbeus and Gremlin, are preferentially expressed in epithelial malignant cell lines" <i>J. Biochem. Mol. Biol. &amp; Biophys.</i> 3:239-242 (1999) |
| N14  | Van Tilbeurgh, H. et al. "Colipase: structure and interaction with pancreatic lipase" <i>Biochim. Biophys. Acta</i> 1441:173-184 (1999)   |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |
| Examiner   | Date Considered   |
| <p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p> |   |

